

**IN THE UNITED STATE PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

**In re application of:** Tak Wing Lam, et al.  
**For:** METHOD FOR FAST RECONSTRUCTION OF CONTENT  
INFORMATION  
**Serial No.** 10/566,875  
**Filed** September 18, 2006  
**Art Unit** 2164  
**Examiner** Fazlul Quader  
**Attorney Docket No.** PA030018  
**Confirmation No.** 9565

**APPEAL BRIEF**

**ON APPEAL FROM GROUP ART UNIT 2164**

**Mail Stop Appeal Brief Patents**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

This Appeal Brief is submitted both in support of the Notice of Appeal filed April 29, 2011 and in response to the Non-Final Office Action dated February 1, 2011.

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## **I. REAL PARTY IN INTEREST**

The real party in interest is Thomson Licensing, the assignee of record, whose assignment is recorded in the USPTO as of September 18, 2006 on five (5) pages beginning at Reel 018342, Frame 0453.

## **II. RELATED APPEALS AND INTERFERENCES**

Appellant is not aware of any pending appeals, judicial proceedings, or interferences which may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

## **III. STATUS OF CLAIMS**

The status of the claims in the present application is provided immediately below as follows:

- a) Claims 1-9 are pending in this application, stand rejected in an Office Action dated February 1, 2011, and are the subject of this appeal.
- b) Claims 1 and 8 are the only independent claims.

## **IV. STATUS OF AMENDMENTS**

The claims listed in Section VIII, Claims Appendix, of this Appeal Brief correspond to the claims as submitted in Appellant's captioned "*Amendment*" filed December 8, 2011, where claim amendments were submitted and entered. All amendments filed in this application have been entered and there are none pending.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

It should be explicitly noted that it is not Appellant's intention that the currently claimed or described embodiments be limited solely to operation within the illustrative embodiments identified below. Furthermore, citations to exemplary descriptions of illustrative embodiments are provided below in association with portions of the claims, which are related to the identified illustrative embodiments, entirely for compliance with, and in satisfaction of, the requirements for filing this appeal. There is no intention to read any further interpreted limitations into the claims as presented.

Moreover, it will be appreciated that additional exemplary descriptions, though not cited herein, may be present in this patent application.

The claimed invention, as recited in claim 1, is directed to a method implemented in an apparatus for reading from removable optical disks (*specification at page 5, lines 28-32*) for retrieving a file system of a removable optical disk (*specification at page 6, lines 24-26*), the file system indicating the physical position of the content on the removable optical disk (*specification at page 2, lines 18-19*), the method comprising: upon insertion of an removable optical disk into the apparatus (*specification at page 6, lines 1-4*), determining a signature of the removable optical disk (*specification at page 6, line 4*) by measuring features based on a data pattern stored on the removable optical disk (*specification at page 6, lines 5-7*), the signature including a plurality of elements (*specification at page 6, lines 9-11*); comparing the signature with a plurality of signatures stored in a content database (*specification at page 6, lines 13-15*); and retrieving the associated file system indicating the physical position of the content on the removable optical disk from the content database if the signature is equal to a signature stored in the content database (*specification at page 6, lines 23-28 and page 7, lines 28-32*).

The claimed invention, as recited in claim 8, is directed to an apparatus for reading from and/or writing to a removable optical disk (*specification at page 5, lines 28-32*), wherein the apparatus includes at least one element adapted for retrieving a file system of the removable optical disk (*specification at page 6, lines 24-26*), the file system indicating the physical position of the content on the removable optical disk (*specification at page 2, lines 18-19*), by performing: upon insertion of an removable optical disk into the apparatus (*specification at page 6, lines 1-4*), determining a signature of the removable optical disk (*specification at page 6, line 4*) by measuring features based on a data pattern stored on the removable optical disk (*specification at page 6, lines 5-7*), the signature including a plurality of elements (*specification at page 6, lines 9-11*); comparing the signature with a plurality of signatures stored in a content database (*specification at page 6, lines 13-15*); and retrieving the associated file system indicating the physical position of the content on the removable optical disk from the content database if the signature is equal to a signature stored in the content database (*specification at page 6, lines 23-28 and page 7, lines 28-32*).

## **VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Certain art-based rejections for this application are based on the following references: U.S. Patent No. 6516337 to Tripp et al. (hereinafter “Tripp”); U.S. Patent Application Publication No. US 20030135464 to Mourad et al. (“Mourad”); and U.S. Patent Application Publication No. US 20050055578 to Wright et al. (“Wright”).

The ground of rejection for this application for which review is sought in this appeal is presented below as follows:

1. Whether claims 1-9 are properly rejected by the USPTO under 35 U.S.C. §103(a) as being unpatentable over Tripp in view of Mourad and further in view of Wright.

## VII. ARGUMENT

Appellant respectfully traverses the rejection in accordance with the detailed arguments set forth below.

**1. CLAIMS 1-9 ARE IMPROPERLY REJECTED BY THE USPTO UNDER  
35 U.S.C. §103(A) AS BEING UNPATENTABLE OVER TRIPP IN  
VIEW OF MOURAD AND FURTHER IN VIEW OF WRIGHT.**

### **A. Claim 1**

Claim 1 is an independent claim that serves directly as a base claim for dependent claims 2-7.

Claim 1 calls for:

A method implemented in an apparatus for reading from removable optical disks for retrieving a file system of a removable optical disk, **the file system indicating the physical position of the content on the removable optical disk**, the method comprising:  
**upon insertion of an removable optical disk into the apparatus, determining a signature of the removable optical disk** by measuring features based on a data pattern stored on the removable optical disk, the signature including a plurality of elements;  
comparing the signature with a plurality of signatures stored in a content database; and  
**retrieving the associated file system indicating the physical position of the content on the removable optical disk from the content database if the signature is equal to a signature stored in the content database.** [Emphasis added].

In rejecting the claims, the Examiner alleges that Tripp, col. 5, lines 14-18 and col. 7, lines 42-52 suggests the feature of the file system indicating the physical position of the content on the removable optical disk, as set forth in claim 1. Appellant respectfully explains that this feature of claim 1 is distinct over Tripp, and thus over the combination of Tripp, Mourad, and Wright.

Tripp, col. 5, lines 14-18, appears to teach an approach to index or catalog objects on a network (a network such as the Internet or World Wide Web). The result of indexing may be a catalog of object references, whereby each object reference is a pointer which specifies a location or address where the object may be found. Col. 7, lines 42-52 appears to teach a program that processes objects stored on the source site and generates signatures for the object. The generated signatures are transmitted from each source site to the central site and then compared to a previously generated signature for the object to determine if the object has changed.

Although Tripp may disclose an object reference is a pointer which specifies a location or address where the object may be found, Tripp's object reference does not indicate where on an optical disk the object is located. Therefore, Tripp does not suggest the file system indicating the physical position of the content on the removable optical disk, as set forth in claim 1.

Tripp's specification of a location or address is completely different from claim 1. For example, Tripp, col. 10, lines 36-45 appears to disclose an agent which determines the root directory path for a particular file system. Another example is an object reference which appears to be included in a catalog of objects in the source location and other locations. Col. 27, line 62-col. 28, line 14. At col. 28, lines 21-29, Tripp refers to "the location" as either at the headquarters of a corporation or at the remote offices of the corporation.

In addition, Tripp, col. 20, lines 26-33 teaches an indexing system which apparently generates a database which includes a number of tables whereby each table includes location and address information for various items of interest. For example, tables 3, 4, 7, 8, and 9 (Tripp, cols. 20-22) apparently include information related to the Host IP address. Tables 10, 11, and 32 (cols. 23 and 39) allegedly include the address information for a particular person.

Appellant respectfully asserts that Tripp's teachings of a location of a file system, in terms of at the headquarters or at a remote location, or the address of a person, is completely different from the physical position of the content on a removable optical disk of claim 1. As such, claim 1 is distinct over Tripp.

Mourad and Wright, separately or in combination, lack any teaching, showing, or suggestion to cure the deficiencies in Tripp discussed above. Specifically, neither Tripp nor the combination of Tripp, Mourad, and Wright teaches, shows, or suggests “the file system indicating the physical position of the content on the removable optical disk” as defined in claim 1. In addition, the Examiner does not rely on Mourad or Wright for teaching the file system indicating the physical position of the content on the removable optical disk. Thus, it is submitted that the combination of Tripp, Mourad, and Wright does not teach, show, or suggest all the limitations in claim 1.

Also, the Examiner alleges that Tripp at col. 5, line 66-col. 6, line 17 discloses the features of upon insertion of an removable optical disk into the apparatus, determining a signature of the removable optical disk, as set forth in claim 1. Appellant respectfully rebuts this line of reasoning.

The method as disclosed by Tripp is not implemented in an apparatus for reading from removable optical disks, nor is it performed upon insertion of an optical disk into the apparatus. Tripp does not mention removable optical disks anywhere in the specification. On page 10 of the Office Action, the examiner refers to col. 13, lines 61-62 as allegedly disclosing local storage media that includes all types. This cited portion of Tripp recites: “The enclosed brochure file is then stored in local storage.” However, Appellant respectfully maintains that Tripp does not suggest that the local storage media includes all types. In contrast to the Examiner’s allegation, Tripp appears to relate closely to hard drives which generally are not frequently exchanged. Such hard drive platters are generally only inserted once into the apparatus, namely during production, when they are completely empty. As such, Appellant respectfully asserts that Tripp does not suggest the features of upon insertion of a removable optical disk into the apparatus, determining a signature of the removable optical disk.

Furthermore, neither Tripp, Mourad, and Wright, separately or in combination, suggests the features of retrieving the associated file system indicating the physical position of the content on the removable optical disk from the content database if the signature is equal to a signature stored in the content database.

Tripp is not at all concerned with retrieving the associated file system of a removable optical disk. Instead, Tripp appears to be concerned about obtaining information about the files that are available on a recording medium.



Mourad and Wright, separately or in combination, lack any suggestion of retrieving the associated file system of a removable optical disk. Furthermore, the Examiner does not rely on Mourad and Wright for teaching or suggesting such features. Therefore, the combination of Tripp, Mourad, and Wright does not suggest retrieving the associated file system indicating the physical position of the content on the removable optical disk from the content database if the signature is equal to a signature stored in the content database.

Also, the Examiner admits that Tripp does not explicitly disclose the feature of the signature is equal to a signature stored in the content database, and alleges that Mourad at paragraph [0218], lines 1-14 teaches this feature. Appellant respectfully submits that this feature of claim 1 is distinct over Mourad.

Mourad, paragraph [0218] recites:

In the Secure Digital Content Electronic Distribution System 100, the issuer of SC(s) protects the integrity of SC(s) by digitally signing it. In general, to create a digital signature of a message, a message owner first computes the message digest (defined below) and then encrypt the message digest using the owner's private key. The message is distributed with its signature. Any recipient of the message can verify the digital signature first by decrypting the signature using the public key of the message owner to recover the message digest. Then, the recipient computes the digest of the received message and compares it with the recovered one. If the message has not being altered during distribution, the calculated digest and recovered digest must be equal.

However, Mourad does not indicate if a signature is equal to a signature stored in a content database. In contrast to claim 1, Mourad appears to teach the recipient computes the digest of the received message and compares it with the recovered one. There is no mention or suggestion in Mourad of a content database.

In addition, on page 5 of the Office Action, the Examiner alleges that it would have been obvious to one of ordinary skill in the art at the time of Appellant's invention to incorporate the teachings of Wright into Tripp of content sending to a central indexing meta data or signatures from objects on a computer network that would have allowed users of Tripp to determine whether the message has not been altered during distribution by comparing the signature with a plurality of signatures stored in a content database. The Examiner further alleges that Wright, Tripp, and Mourad are from the same field of endeavour.

Appellant respectfully asserts that a person having ordinary skill in the art would not combine the features of Tripp, Mourad, and Wright. First, Tripp, Mourad, and Wright are not from the same field of endeavor. For example, Mourad appears to relate to digital distribution using a web broadcast infrastructure, which is completely different from reading from removable optical disks of claim 1. Wright appears to teach signature comparison (see, for example, Wright, paragraph 0167). However, Wright is concerned with virus detection. The underlying signatures of Wright are in no way related to or equivalent to signatures of a removable optical disk.

Appellant respectfully maintains that the Examiner simply provides conclusory statements to support the rejection. Nowhere is there any suggestion in Tripp, Mourad, and Wright for the features of retrieving the associated file system indicating the physical position of the content on the removable optical disk from the content database if the signature is equal to a signature stored in the content database.

KSR makes clear that rejections on obviousness cannot be sustained by mere conclusory statements; instead KSR requires that an Examiner provide “some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness.” (KSR Opinion at p. 14). An Examiner must “identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does,” (KSR Opinion at p. 15). And, the Examiner must make “explicit” this rationale of “the apparent reason to combine the known elements in the fashion claimed,” including a detailed explanation of “the effects of demands known to the design community or present in the marketplace” and “the background knowledge possessed by a person having ordinary skill in the art.” (KSR Opinion at p. 14). Anything less than such an explicit analysis may not be sufficient to support a prima facie case of obviousness.

Appellant submits that the Examiner has not presented a prima facie case of obviousness and the rejection should be withdrawn.

For the reasons set forth above, it is believed that claim 1 would not have been obvious to a person of ordinary skill in the art upon a reading of Tripp, Mourad, and Wright, either separately or in combination. Therefore, it is submitted that claim 1 is allowable under 35 U.S.C. §103. It is respectfully requested that the Board reverse this rejection of claim 1.

### **B. Dependent Claims 2-7**

Claims 2-7 depend directly from claim 1. Each dependent claim includes all the features of claim 1 including all the particular features discussed immediately above. In view of this dependence and for the sake of brevity in this brief, Appellant applies the above arguments from claim 1 for each of dependent claims 2-7. Thus, it is submitted that claims 2-7 are allowable at least by virtue of their dependency from claim 1 and because each claim recites further distinguishing features thereover. It is respectfully requested the Board reverse the rejection of dependent claims 2-7.

### **C. Claim 8**

Claim 8 is an independent claim from which claim 9 ultimately depends. Claim 8 calls for:

An apparatus for reading from and/or writing to a removable optical disk, wherein the apparatus includes at least one element adapted for retrieving a file system of the removable optical disk, **the file system indicating the physical position of the content on the removable optical disk**, by performing:

**upon insertion of an removable optical disk into the apparatus, determining a signature of the removable optical disk** by measuring features based on a data pattern stored on the removable optical disk, the signature including a plurality of elements;

comparing the signature with a plurality of signatures stored in a content database; and

**retrieving the associated file system indicating the physical position of the content on the removable optical disk from the content database if the signature is equal to a signature stored in the content database.** [Emphasis added].

Claim 8 is an apparatus claim including limitations substantially similar in nature to those discussed above with respect to claim 1 (although claim 8 must be interpreted based upon its own specific features). Claim 8 calls for “the file system indicating the physical position of the content on the removable optical disk,” “upon insertion of an removable optical disk into the apparatus, determining a signature of the removable optical disk by measuring features based on a data pattern stored on the removable optical disk, the signature including a plurality of elements,” and “retrieving the associated file system indicating the physical position of the content on the removable optical disk from the content database if the signature is equal to a signature stored in the content database.”

Appellant applies the arguments from claim 1 above for claim 8 without any loss of generality or limitation. For all the reasons set forth herein with respect to claim 8 and above with respect to claim 1, it is believed that the elements of claim 8 are not taught, shown, or suggested by Tripp, Mourad, and Wright, either separately or in combination. It is therefore submitted that claim 8 would not have been obvious to a person of ordinary skill in the art upon a reading of Tripp, Mourad, and Wright, either separately or in combination. Thus, it is submitted that claim 8 is also allowable under 35 U.S.C. §103. It is respectfully requested that the Board reverse this rejection of claim 8.

**D. Dependent Claim 9**

Claim 9 depends from claim 8 and includes all the features of claim 8 including all the particular features discussed immediately above. In view of this dependence and for the sake of brevity in this brief, Appellant applies the above arguments from claim 8 for dependent claim 9. Thus, it is submitted that claim 9 is allowable at least by virtue of their dependency from claim 8 and because each claim recites further distinguishing features thereover. It is respectfully requested the Board reverse the rejection of dependent claim 9.

**Conclusion**

In light of these remarks, it is submitted that claims 1-9 would not have been obvious to a person of ordinary skill in the art upon a reading of Tripp, Mourad, and Wright. Therefore, it is believed that claims 1-9 are allowable under 35 U.S.C. §103. It is respectfully requested that the Board of Patent Appeals and Interferences reverse the rejection of claims 1-9.

Respectfully submitted,

Date: 6/21/11

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## **VIII. CLAIMS APPENDIX**

1. (Previously presented) A method implemented in an apparatus for reading from removable optical disks for retrieving a file system of a removable optical disk, the file system indicating the physical position of the content on the removable optical disk, the method comprising:

upon insertion of an removable optical disk into the apparatus, determining a signature of the removable optical disk by measuring features based on a data pattern stored on the removable optical disk, the signature including a plurality of elements;

comparing the signature with a plurality of signatures stored in a content database; and

retrieving the associated file system indicating the physical position of the content on the removable optical disk from the content database if the signature is equal to a signature stored in the content database.

2. (Previously presented) The method according to claim 1, wherein the comparing the signature with a plurality of signatures stored in a content database includes evaluating the distances between the determined signature and the signatures stored in the content database.

3. (Previously presented) The method according to claim 1, wherein the determining the signature of the removable optical disk and comparing the signature with a plurality of signatures include:

determining a first part of the signature including a plurality of elements;

comparing the first part of the signature with corresponding parts of the plurality of signatures stored in the content database;

determining a further part of the signature if the first part of the signature is equal to the corresponding part of at least one signature stored in the content database; and

comparing the further part of the signature with corresponding parts of the plurality of signatures stored in the content database.

4. (Previously presented) The method according to claim 1, wherein, in the comparing the signature with a plurality of signatures stored in a content database, a negative progressive search approach is employed, in which the elements of the determined signature are compared with the corresponding elements of the signatures stored in the content database one at a time, wherein a negative search result is concluded if there is no match between one element of the signature and the same element of all the signatures stored in the content database.

5. (Previously presented) The method according to claim 1, further comprising:  
obtaining the file system from the removable optical disk if the determined signature is not equal to a signature stored in the content database; and  
storing the obtained file system and the determined signature in the content database.

6. (Previously presented) The method according to claim 1, wherein the signature is unique for every removable optical disk.

7. (Previously presented) The method according to claim 1, wherein the signature elements are selected from disk status such as open or closed disk, number of sessions or number of tracks in each session, from timing information such as the lead-in time of each session, the lead-out time of each session, total time of each session or subcode information of each track, or from data integrity such as data checksums of specific tracks.

8. (Previously presented) An apparatus for reading from and/or writing to a removable optical disk, wherein the apparatus includes at least one element adapted for retrieving a file system of the removable optical disk, the file system indicating the physical position of the content on the removable optical disk, by performing:

upon insertion of an removable optical disk into the apparatus, determining a signature of the removable optical disk by measuring features based on a data pattern stored on the removable optical disk, the signature including a plurality of elements;

comparing the signature with a plurality of signatures stored in a content database; and

retrieving the associated file system indicating the physical position of the content on the removable optical disk from the content database if the signature is equal to a signature stored in the content database.

9. (Previously presented) The apparatus according to claim 8, wherein the apparatus is adapted to perform the retrieval of the file system of the removable optical disk after an occurrence of a condition selected from a group consisting of insertion of the removable optical disk, transferral of the removable optical disk into a playback position, and wake up from a power down mode.



## **IX. EVIDENCE APPENDIX**

No evidence has been submitted pursuant to §§ **1.130**, **1.131**, or **1.132** of this title. No other evidence has been entered by the Examiner and/or relied upon by Appellant in this appeal, at this time.

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## **X. RELATED PROCEEDINGS APPENDIX**

Appellant is not aware of any appeals or interferences related to the present application.